Home > Restriction Endonucleases > Products > XhoI

XhoI

XhoI has been reformulated with Recombinant Albumin (rAlbumin) beginning with Lot #10161948. Learn more.

We are excited to announce that all reaction buffers are now BSA-free. NEB began switching our BSA-containing reaction buffers in April 2021 to buffers containing Recombinant Albumin (rAlbumin) for restriction enzymes and some DNA modifying enzymes. Find more details at www.neb.com/BSA-free.

5′...C▼TCGAG...3′
3′...GAGCT▲C...5′

Isoschizomers | Single Letter Code | Pronunciation:

- Time-Saver™ qualified for digestion in 5-15 minutes
- 100% activity in rCutSmart™ Buffer (over 210 enzymes are available in the same buffer) simplifying double digests
- Supplied with 1 vial of Gel Loading Dye, Purple (6X)
- Restriction Enzyme Cut Site: C/TCGAG

Reagents Supplied | **3,801 Product Citations**

Featured Video

Reduce Star Activity with High-Fidelity Restriction Enzymes
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Catalog #	Concentration	Size	Your Price	Quantity
R0146S	20,000 units/ml	5,000 units	$77.00	0
R0146L	20,000 units/ml	25,000 units	$317.00	0
R0146M	100,000 units/ml	25,000 units	$317.00	0

Add to Cart

Product Information

Product Source
An *E. coli* strain that carries the XhoI gene from *Xanthomonas holcicola* (ATCC 13461).

This product is related to the following categories: Restriction Endonucleases T Z, Time-Saver Qualified Restriction Enzymes Products

This product can be used in the following applications: Restriction Enzyme Digestion

Reagents Supplied

Reagents Supplied
The following reagents are supplied with this product:

NEB #	Component Name	Component #	Stored at (°C)	Amount	Concentration
R0146S			-20		
	XhoI	R0146SVIAL	-20	1 x 0.25 ml	20,000 units/ml
	rCutSmart™ Buffer	B6004SVIAL	-20	1 x 1.25 ml	10 X
	Gel Loading Dye, Purple (6X)	B7024AVIAL	25	1 x 0.5 ml	6 X
R0146L			-20		
	XhoI	R0146LVIAL	-20	1 x 1.25 ml	20,000 units/ml
	rCutSmart™ Buffer	B6004SVIAL	-20	1 x 1.25 ml	10 X
	Gel Loading Dye, Purple (6X)	B7024AVIAL	25	1 x 0.5 ml	6 X
R0146M			-20		
	XhoI	R0146MVIAL	-20	1 x 0.25 ml	100,000 units/ml
	rCutSmart™ Buffer	B6004SVIAL	-20	1 x 1.25 ml	10 X
	Gel Loading Dye, Purple (6X)	B7024AVIAL	25	1 x 0.5 ml	6 X

Properties & Usage

Unit Definition
One unit is defined as the amount of enzyme required to digest 1 µg of λ DNA (HindIII digest) fragments in 1 hour at 37°C in a total reaction volume of 50 µl.

Reaction Conditions
1X rCutSmart™ Buffer
Incubate at 37°C

1X rCutSmart™ Buffer
50 mM Potassium Acetate
20 mM Tris-acetate
10 mM Magnesium Acetate
100 µg/ml Recombinant Albumin
(pH 7.9 @ 25°C)

Activity in NEBuffers
NEBuffer™ r1.1: 75%
NEBuffer™ r2.1: 100%
NEBuffer™ r3.1: 100%
rCutSmart™ Buffer: 100%

Diluent Compatibility
- Diluent A

Storage Buffer
10 mM Tris-HCl
50 mM KCl
1 mM DTT
0.1 mM EDTA
200 µg/ml Recombinant Albumin
50% Glycerol
pH 7.4 @ 25°C

Heat Inactivation
65°C for 20 minutes

Methylation Sensitivity
dam methylation: Not Sensitive
dcm methylation: Not Sensitive
CpG Methylation: Impaired

Isoschizomers
PaeR7I
Sfr274I
SlaI

Related Products

Companion Products

- Monarch® Plasmid Miniprep Kit
- Monarch® DNA Gel Extraction Kit
- Monarch® PCR & DNA Cleanup Kit (5 µg)

Materials Sold Separately

- rCutSmart™ Buffer
- Gel Loading Dye, Purple (6X)

Product Notes

1. XhoI is an isoschizomer of PaeR7I.
2. This enzyme has shown to have lower activity on some supercoiled plasmids, with more than 1 unit required to digest 1 µg plasmid DNA. For complete digestion of 1 µg of plasmid DNA please follow our recommended digestion protocol.
3. Impaired by CpG methylation.

Protocols, Manuals & Usage

Tools & Resources

FAQs & Troubleshooting

Citations & Technical Literature

Quality, Safety & Legal

Featured Videos View Video Library

Reduce Star Activity with High-Fidelity Restriction Enzymes

TIME-SAVER™ Protocol for Restriction Enzyme Digests

NEB® TV Ep. 15 – Applications of Restriction Enzymes

Restriction Enzyme Digest Protocol: Cutting Close to DNA End

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